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AUTHOR Noll, Corrie Elizabeth

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ABSTRACT

The memorization of Bible verses is an important goal of many Christian schools. Teachers in Christian schools use many different techniques to help their students memorize Bible verses. One popular traditional method is to have the students repeat the verse many times until they can repeat it from memory. In this project the researcher compared this traditional method to the method of putting Bible verses to song and having the students learn the song and practice the verses by singing the song. Over a 12-week period the researcher worked with 16 students in a private Christian school kindergarten classroom. These two methods were then compared using a paired comparison t-test. For the first three weeks of testing the researcher introduced a new verse at the beginning of each week and had the students memorize them using the traditional method. The students were then tested on the verse at the end of each week and a final test was given 6 weeks following the final verse. During this final test the students recited all three of the previously memorized verses. This test was given to determine long-term retention. For the second 3-week period students were introduced to new verses put to song at the beginning of each week. The students memorized the verse to song over the course of the week and then recited it at the end of the week. A final test was given six weeks following the memorization of the final verse. The students were tested on all three verses to song at this time. This test was given to determine the long-term retention of the verses to song. After the results were analyzed, the researcher concluded that the memorization of verses to song had significant effect on the long-term retention of Bible verses. Therefore, the researcher rejects the null hypothesis that stated there is no difference between the two methods. The researcher suggests that more research needs to be done in this area and areas relating to the research to have more effect on how verses are memorized in Christian school classrooms. Appendixes contain a permission letter and music used in the study. (Contains 27 references, 1 table, and 2 figures.) (Author/RS)



A COMPARISON OF BIBLE VERSE MEMORAZATION USING TRADITIONAL TECHNIQUES VERSUS USING SONG

An Action Research Project

Presented to

The Department of Teacher Education

Johnson Bible College

In Partial Fulfillment

Of the Requirement for the Degree

Master of Arts in

Holistic Education

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by

Corrie Elizabeth Noll

July 2003

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The memorization of Bible verses is an important goal of many Christian schools. Teachers in Christian schools use many different techniques to help their students memorize Bible verses. One popular traditional method that many teachers use is to have the students repeat the verse many times until they can repeat it from memory. In this project the researcher compared this traditional method to the method of putting Bible verses to song and having the students learn the song and practice the verses by singing the song.

Over a twelve-week period of time the researcher worked with 16 students in a private Christian school kindergarten classroom. All sixteen students memorized three traditional method verses and three verses to song. These two methods were then compared using a paired comparison t-test.

For the first three weeks of testing the researcher introduced a new verse at the beginning of each week and had the students memorize them using the traditional method. The students were then tested on the verse at the end of each week and a final test was given six weeks following the final verse. During this final test the students recited all three of the previously memorized verses. This test was given to determine long-term retention.

For the second three-week period students were introduced to new verses put to song at the beginning of each week. The students memorized the verse to song over the course of the week and then recited it at the end of the week. A final test was given six



weeks following the memorization of the final verse. The students were tested on all three verses to song at this time. This test was given to determine the long-term retention of the verses to song.

After the results were analyzed, the researcher concluded that the memorization of verses to song had significant effect on the long-term retention of Bible verses.

Therefore, the researcher rejects the null hypothesis that stated there is no difference between the two methods. The researcher suggests that more research needs to be done in this area and areas relating to the research to have more effect on how verses are memorized in Christian school classrooms.



APPROVAL PAGE

This action research project by Corrie Noll is accepted in its present form by the Department of Teacher Education at Johnson Bible College as satisfying the action research project requirements for the degree Master of Arts in Holistic Education.

Chairperson, Examining Committee

Member, Examining Committee

7-15-03

Date



ACKNOWLEDGEMENTS

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Chapter 1

INTRODUCTION

Significance of the Problem

Many Christian schools stress the importance of Bible memorization, but most of the memorization seems to be put into short-term memory then later forgotten by the students. The rote memorization of the verses seems to help the students remember until the verses have to be recited, but after the recitation they are forgotten. The researcher believed that if the verses were put to song it would aid in the long-term retention of the verses.

Statement of the Problem

Effective memorization of Bible verses is a goal of many churches and also in Christian Schools. Use of effective mnemonic devices and singing may enhance the memorization process. This study tested whether or not traditional rote memorization of Bible verses, as used in an East Tennessee private Christian school, was effective in helping students memorize verses long term or if putting Bible memory verses to song was more effective.

Definition of Terms

<u>Bible Verses</u> In this study, Bible verses referred to the verses of approximate equal length that students memorize on a weekly basis. The Bible translation used in this study was the New International Version.

<u>Traditional Memorization</u> For the purpose of this study traditional memorization was defined as instruction traditionally used in the classroom of study to memorize Bible



verses. This included saying the verse as a class multiple times together over the period of the week and saying the verse with parents or other assistants at home.

Verses to Song In this study, verses were given a tune to which they were sung.

This was the method that was compared to the traditional method.

Limitations of the Study

Certain limitations of the study need to be considered as follows:

The study was done in a self-contained Christian school classroom that was not randomly selected.

The research was limited to only the one classroom as a sample.

The researcher was the teacher in the classroom.

Assumptions

The researcher assumed the following:

Children in the classroom had equal ability to learn.

Verses used in the control were comparable to the verses used with song because the verses contained the same number of words and were of comparable difficulty.

<u>Hypothesis</u>

There is no significant difference at the .05 level in achievement of students who use traditional memorization techniques to memorize Bible verses compared to students who memorize Bible verses using song when tested six weeks after memorization.



Chapter 2

REVIEW OF RELATED LITERATURE

Memory in Children

The memory process is started early. Newborn infants, who have had twelve hours of contact with their mothers after birth, are more likely to respond to a stimulus that produces their mothers' voice over a stimulus that produces an unfamiliar voice. DeCasper and Fifer in 1980 gave bottles to infants. When an infant sucked rapidly on the nipple of the bottle he was rewarded with his mother's voice. When the infant decreased his rate of sucking he heard an unfamiliar voice. After the infant was given the initial responses to his rate of sucking, the infant was more likely to suck at a fast rate in order to hear his mother's voice. When the experiment was switched so that the mother's voice was heard when the infant sucked at a slower rate and the unfamiliar voice was heard at a high rate, the infants were more likely to suck at the slower rate, showing that the infants were responding to the voices and not coincidentally sucking at a fast rate (Kail, p.106). Researchers believe that the process of memory begins from the time a child is born and develops as the child grows. Children begin to distinguish between human and nonhuman objects at around four months old and at seven months old, the child begins recognizing, or remembering his parents. This is one of the first major steps in the process of memory (Kail, p.1).

Young children benefit from the use of language at the time of an event, when later they are asked to recall that event. Haden, Didow, Ornstein and Eckerman (1997) showed two year old children could recall an event with sparse details and were much



more likely to remember in detail events where things were discussed and manipulated jointly with an adult, instead of things attended to by themselves (Craik & Tulving, p.288). Tessler and Nelson (1994) found four year old children could recall a visit to the museum with their mother, but only the conversations and things that the mother pointed out. They could not remember things that they saw, but did not discuss.

Once a child is school age, he has the ability to remember many things, such as; the alphabet, numbers, how to get to the restroom or the library inside the school building and events that happen over the course of the day. Children at this age, though, have flaws in their ability to remember. A child under seven may hope he remembers to bring his folder to school the following day, but the child will not naturally write a note or lay the folder by the door the night before. A child at the age of seven typically does not rehearse or help himself remember, but can be trained to do so. By the time a child is nine he is very capable of doing this naturally (Kail, p.11).

A child that is in middle school has a much better ability to remember items than a kindergarten student (Kail, p.2). Kreutzer, Leonard, and Flavell (1975) gave kindergarten children and fifth grade children both a situation where they were to help a friend remember which Christmas he received his dog as a present. Nearly half of the kindergarteners tested could not come up with a strategy to help a friend remember how old the dog was, but all the fifth graders in this experiment were able to do so (Kail, p.22).

Many times an older child can report events in more detail than a younger child (Howe, p.37). Howe says this is not a case of better memory, but that the older child



has more general knowledge to pull from (37), but children are still very susceptible to suggestibility. Bruck and Ceci say that children's memories can be molded by suggestion (419). A child's memory becomes more concrete as he grows older and he is able to improve his memory skills, which help him in school. He begins to be able to distinguish what helps him and what does not help him as he solves problems related to memory (Kail, p.164).

Memory Development

Memory has been described in a variety of ways. More then 2000 years ago Plato described memory as a block of wax. Since that time memory has been compared to clocks, computers, telephone switchboards, and even a cow's stomach, but the memory is much more complex than anything to which it can be equated. In the late 1980s scientists really began to understand how the brain works (Allman & Goode, p.48).

Ballard and Alessi describe normal memory function to involve processing information by encoding, storing, and retrieving it (398). Piaget and Inhelder describe memory as the conservation of habits or the results of training and the act of simply recognizing (2). Webster's Dictionary has a variety of definitions for memory. The first definition says memory is "the power, act, or process of recalling to mind facts previously learned or past experiences." Another definition the dictionary gives for memory defines it as the total of what one remembers. Memory can be seen in a variety of ways.

Retrieving is an important part of the process of memory. Retrieving something in the memory is brought forth by cues. If a child is given a test in the same classroom



where he learned the material, it is possible he will remember what he learned by the cue of the environment (Alessi & Ballard, p.398). Other cues can bring forth memories. Associating a word with another word can help cue the recall of the word a person wishes to remember. Emotions or moods can also affect recall. If a person is in a certain mood while encoding a memory he may be more likely to remember the encoded memory by cueing it with the same emotion or mood (Craig & Tulving, p.99-100).

It is accepted now that memory is not stored in one specific location of the brain, but in several regions of the brain. Memory is stored first in the hippocampus and then is reorganized and stored in other places in the brain (Alessi & Ballard, p.398). The brain is the most complex organ in the whole human body. In fact, it is the most complex system in the whole known universe. Inside the brain are billions of neurons that are connected by trillions of synapses. Scientists may never know how the brain gives rise to the mind, but they can look at what happens inside the brain (Pinker, p.90).

Music and Memory

Songs may cue many things in the brain. If a teacher puts a book to song and points to the words while singing and the children follow along, singing as well, the song may trigger in the children's brains that the print contains meaning. If a child continues with this song he may memorize it and sing it while looking at the words in the book. This memory is a beginning step in reading (Fisher & McDonald, p.106-107). No one knows for sure why music tends to be easily recalled. In some cases in can even be a nuisance. Many people have had the problem of getting a song stuck in their head and not being able to get it out. The playback of music probably originates in the auditory



cortex of the brain, which handles both the listening and the playback of music and other sounds. Music that is simple and repetitive is more likely to be remembered than music that is more complex. Musical phrases are chunked together and remembered as a unit, so shorter tunes are more memorable (Shouse, p.44).

Before the written word, history was recorded many times in song. Song is a way to reinforce memory. Teachers can use this memory reinforcement technique to help students learn. Calvert found students who heard the preamble to the US Constitution set to a song remembered the words better then those who simply read the preamble (Shouse, p.44).

Hall found that young children may not understand the meaning of the music, but can still recall the music. Older children can describe the message of a rap song from memory (809).

Ayers, Dowling, and Tillmannn describe memory as something that is always changing. Sometimes it improves. Sometimes it gets worse, but it almost never stays the same. They suggest that just listening to music can improve memory (249). If just listening to music can improve the memory, then reciting to song should be an efficient retrieval technique or cue.

Scripture and Memory

Evans describes memory and gives ideas of how to memorize scripture. He says that a student must be interested in what he is memorizing. If the student takes pleasure in what he is doing he is more likely to retain the information. He also suggests that the



student use a theme when memorizing. This will help the student connect the information as well as make it more relevant for future use. He also proposes that a student close his eyes when recalling, helping him visualize and block outside distractions (32-34). Evans also emphasized daily practice. Scripture that is practiced daily is more likely to be recalled later, and scripture that is memorized with the intention of being remembered forever will be less likely to be crammed in the brain and then forgotten (25-27).

Evans gives an interesting reason to remember scripture. He says that a man was confounding all the ministers in a certain area. He was arguing about God and always winning the arguments. This continued until a young student confronted the man and instead of arguing, quoted scripture. This young man, Moody, brought the arguing man to Christ. Evans says that the difference between Moody and the ministers was that Moody knew his scriptures (Evans, p.12-14). There are many instances in the Bible where Jesus himself quoted scripture instead of arguing. Jesus says in Matthew 4:4, "It is written: 'Man does not live on bread alone, but on every word that comes from the mouth of God' [Deuteronomy 8:3]." Johnson says that rote memory or repetition of scripture is inadequate. He says that repeating a verse over and over again will result in a temporary memory, but the retention of that memory is not good (22). Johnson suggests memorizing a general thought in scripture first and then working from there. He also suggests intending to remember and to react actively to memorization by writing scripture down, saying it out loud and grouping things together (45). Johnson also suggests that a person use memory improvement techniques. He says that by simply



repeating something memory retention is usually only 20 percent, but memory retention can be increased to 80 or 90 percent when memory improvement techniques are used. One example Johnson gives is to use acronyms. Acronyms can be used to remember lists or categories. For example, if a person wants to remember the places Paul went on his first missionary journey, he may take the beginning letters of the cities and make an acronym from them (49-50). Using imagination and illustrations can help in memory retention. Jesus used this technique to help people remember. He used imaginative illustrations. He declared that, "I am the door," "stand at the door and knock," "I am the good shepherd," and "In my Father's house are many mansions." He did not mean these things literally, but he used them to conjure up images and imagination (66-67). Johnson says that nearly all memory systems where created before print and many before the invention of writing. Religious leaders, to assist their people in remembering theological truths, dogma, and religious responses, often used chants and verse (48). Chants and song were helpful in the past and can still be used today as a method of recall.

Research confirms that memory is something that develops over a period of time, so that as children grow their memory improves. Memory is a complex function of the brain that can not be entirely understood or described, but there are a variety of cues that can assist a person's memory. One such cue is music, which is an effective memory tool and can be used to assist in the long term memory of Bible verses.



Chapter 3

METHODS AND PROCEDURES

Selection of the Subjects

The subjects in this study were 16 kindergarten students between the ages of four years eleven months and five years eleven months. The class consisted of 10 girls and six boys. The socio-economic status of the class was middle to upper class. The subjects in the classroom were all of Caucasian descent with the exception of one child whose mother was of Spanish descent. The research was conducted at a private Christian School in the East Tennessee area.

Time Line

The researcher conducted three weeks of the research before the Christmas break began and then the remaining three weeks in the spring semester. The research covered a total of twelve weeks, with experimentation and testing taking place in eight of those weeks.

	Week One	Week Two	Week Three	Week Four	Week Five	Week Six
Traditional Method	Verse One Psalm 105:3	Verse Two 1 John 5:3	Verse Three Psalm 98:4			
Song Method				Verse Four Psalm 135:5	Verse Five James 1:22	Verse Six Psalm 116:1

FIGURE 1

Weeks of Memorization Using The Traditional and Song Methods



The first three weeks the subjects memorized verses using the traditional method, and the next three weeks the subjects memorized the verses using the song technique. There were two weeks for testing with the first testing week taking place six weeks after the first method and the second week of testing taking place six weeks after the second method. (See Figures 1 and 2).

Week	1	2	3	4	5	6	7	8	9	10	11	12
Traditional Method	Original Test One	Original Test Two	Original Test Three						Follow Up Test 1, 2, 3			
Song Method				Original Test One	Original Test Two	Original Test Three		•				Follow Up Test 1, 2, 3

FIGURE 2

Weeks of Testing Using The Traditional and Song Methods

Tests

The subjects were given a test at the end of each week during the three weeks of traditional memorization and a follow up test was given six weeks after the third week of memorization. The same format was used for the song method. (See Figure 2). The researcher assumed that all the children would be able to say the verse after one week and did not give a test score, but the researcher gave a test score consisting of numbers during the follow up testing. In the test scoring a number four represented that the subject could say the verse without any mistakes and without any assistance. A number three represented that the child was able to say the verse without assistance but not without mistakes. A number two represented that the subject was able to say the verse only after



assistance or prompting and a number one represented that the student forgot the verse entirely. During testing the subjects were cued to say the verse when the researcher gave the subjects the Bible reference.

Experimental Factor

The experimental factor in this research was the method used to aid in the memorization of Bible verses. The two methods used were a traditional method of memorizing Bible verses and a method in which the verses were put to song.

Statistical Analysis

The researcher compared the scores using a paired comparison t-test between the traditional method and the verses to song method processes.



Chapter 4

RESULTS

Analysis of Data

In this study the researcher attempted to determine if using verses to song to aid in the retention of Bible verses would be more effective than a traditional method. There were sixteen students in the experimental and control groups. The subjects memorized three verses over the period of three weeks and used the traditional method. After a lapse of six weeks the subjects were given a follow up test to determine long-term retention. This procedure was repeated using the methods of verses to song. Since each of the subjects memorized three verses for each experiment the researcher had a total of 48 scores for each experiment.

After completing the paired comparison t-test, the researcher found that the test indicated a significant difference between the two treatments at a .05 level of significance (See Table 1).

TABLE 1

COMPARISON OF MEANS OF EXPERIMENTAL AND CONTROLLED SCORES

Groups	N	Means	Mean Difference	t Stat	T Critical two-tail
Experimental	48	3.25	0.08	-7.65*	2.01
Control	48	2.27	-0.98	-7.03	2.01

^{*} sig. > .05

The hypothesis stated that there would be no significant difference at the .05 level in achievement of students who used traditional memorization techniques to memorize



Bible verses compared to students who memorized Bible verses using the verses to song method when tested six weeks after memorization. The researcher rejects this hypothesis.



Chapter 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

This study sought to discover if the use of music would aid in the retention of Bible verses. During the study subjects were given six Bible verses to memorize, with three verses being memorized using traditional methods and three being memorized to song. During the first three weeks the students were introduced to a new verse at the beginning of each week. They memorized these verses using a traditional method and were tested on the verse at the end of each week. A follow up test was performed six weeks after the final verse was memorized. During the second three weeks subjects were introduced to a new verse at the beginning of each week. The subjects memorized these verses to song. A follow up test was performed six weeks after the final verse was memorized. The researcher then compared the two methods and found that there was a significant difference at the .05 level of significance.

Conclusions

Memorizing verses to song made a significant difference in the long-term retention of Bible verses.

During the experimental testing the researcher found that the subjects would sing the song outside of the instruction time. She observed subjects singing the song at recess, lunchtime, and during free activity. She believes that the extra time used practicing as well as the natural flow of the music may have helped the long-term retention of the



students. The researcher did not observe subjects repeating the traditional method verses outside of time when they were instructed to do so. The researcher also believes that the simple repetitive tunes used aided in the retention of the verses.

Recommendations

The researcher recommends that further research should be conducted using song as a tool to aid in retention. Further research could focus on putting other things to music. For example, a researcher could study the retention of dates or places in a history course by putting the dates and places to song.

The researcher also recommends that teachers may want to use this method as one way of teaching students to memorize Bible verses. It appears that it would be effective in helping students retain verses long-term. More research should be done to determine this. Research that spans over a longer period of time and uses more subjects would be a helpful addition to this research.



BIBLIOGRAPHY



BIBLIOGRAPHY

BOOKS

- Bible: New International Version. (1984). International Bible Society.
- Bjork, E. & Bjork, R. (Eds.). (1996). Memory. (2nd ed.). San Diego: Academic Press.
- Craik, F. & Tulving, E. (Eds.). (2000). <u>The Oxford Handbook of Memory</u>. New York: Oxford University Press.
- Evans, W. (1910). <u>How to Memorize</u>. Chicago: The Bible Institute Colportage Association.
- Haith, M. & Sameroff, A. (Eds.). (1996). <u>The Five to Seven Year Shift: The age of Reason and Responsibility</u>. Chicago: The University of Chicago Press.
- Howe, M. (2000). <u>The Fate of Early Memory: Developmental Science and the Retention of Childhood Experiences</u>. Washington, DC: American Psychological Association.
- Inhelder, B. & Piaget, J. (1973). <u>Memory and Intelligence</u>. New York: Basic Books.
- Johnson, B. (1976). What Was That Verse Again? Santa Barbra, CA: Quill Publications
- Kail, R. (1984). <u>The Development of Memory in Children</u> (2nd ed.). New York: W.H. Freeman and Company.
- Seamon, J. (Ed.). (1980). <u>Human Memory: Contemporary Readings</u>. New York: Oxford University Press.
- Storch, E. (2002). <u>I Love God's Word!</u>: <u>Scripture Memory in Song</u>. Greensboro, NC: Resting Place Publications.
- Wadsworth, B. (1989). <u>Piaget's Theory of Cognitive and Affective Development</u> (4th ed.). New York: Longman.



PERIODICALS

- Alessi, H. & Ballard, M. (2001). Memory Development in Children: Implications for Children as Witnesses in Situations of Possible Abuse. <u>Journal of Counseling and Development</u>, 79 (Fall), 398-404.
- Allman, W. & Godde, E. (1988). How the Brain Really Works its Wonders. <u>U.S.</u> News and World Report, 104, (June 27), 1-5.
- Ayers, D., Dowling, W. & Tillmann, B. (2001). Memory and the Experience of Hearing Music. <u>Music Perception</u>, 19 (Winter), 249-276.
- Bruck, M. & Ceci, S. (1999). The Suggestibility of Children's Memory. <u>Annual Review of Psychology</u>, 419-430.
- Chabris, C. (1999). The Myth of the First Three Years: A New Understanding of Early Brain Development and Lifelong Learning. Commentary, 108, (December), 1-2.
- DeFrancesco, L. (2002). Watching how the Brain Grows: MRI Offers New Insight into Brain Development. <u>The Scientist</u>, 16, (February 4), 1-3.
- Fisher, D., McDonald, N. (2001). The Intersection Between Music and Early Literacy Instruction: Listen to Literacy! Reading Improvement, 38 (Fall), 106-115.
- Hall, P. (1998). The Relationship Between Types of Rap Music and Memory in African American Children. Journal of Black Studies, 28 (July), 802-814.
- Lee, J. (1999). Test Anxiety and Working Memory. <u>The Journal of Experimental Education</u>, 67 (Spring), 218-234.
- Pinker, S. (2000). Will the Mind Figure Out how the Brain Works? Understanding how Neurons Operate is One Thing; Understanding how They Make Us the Conscious Beings We are is Another Matter. <u>Time</u>, 155, (April 10), 1-2.
- Shouse, B. (2001). Oops I did it Again: Musical Memory and Neurological Research. New Scientist, 171, (July 28), 1-2.
- Sorokin, E. (2002). Chewing Gum Expands the Mind. <u>Insight on the News</u>, 18, (April), 32.



ERIC

Margulies, N. & Sylwester, R. (1998). Discover Your Brain: Memory. Aquiring, Editing, Recalling, Forgetting. (ED423139). Arizona.

Sprenger, M. (1999). Learning and Memory: The Brain in Action. (ED433952). Virginia.

Stone, S. (1993). The Role of Early Memory in Early Literacy Acquisition. (ED366901). Arizona.



APPENDICES



APPENDIX ONE Letter of Approval

To Whom It May Concern:

I grant permission to Corrie Noll to conduct her research proposal, A Comparison of Bible Verse Memorization Using Traditional Techniques Versus Using Song, in Mrs.

Libby Hamel's kindergarten classroom at Christian Academy of Knoxville.

Jane Williams

Elementary Principal

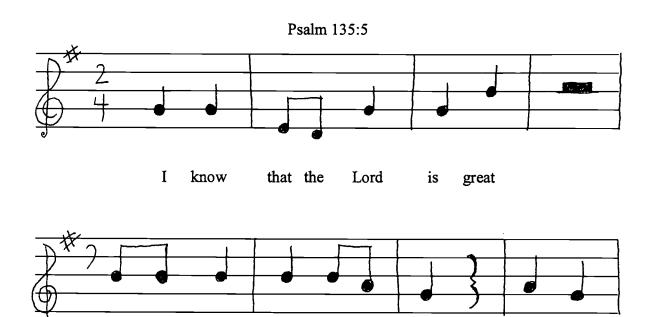
Christian Academy of Knoxville

529 Academy Way

Knoxville, TN 37922



APPENDIX TWO Music Used in Study



great- er

is

than

all

gods



that our

Lord

Psalm 116:1



I love the Lord

for he heard my voice



he heard my cr- y for

mer- cy



James 1:22



Do not mere-

ly list- en

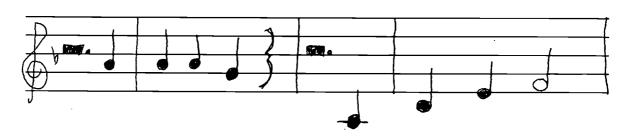
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and so

de-

ceive your- self



Do what it says

Boom

Boom Boom Boom





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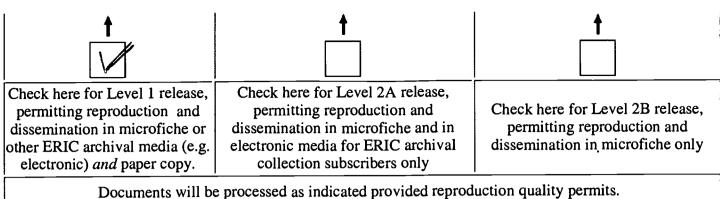
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Signature: GOMU E. Noll	Printed Name/Position/Title Corrie E. Noll	:
Organization/Address: Johnson Bible College 7900 Johnson Drive	Telephone: (865)251-3405	Fax:
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